

LAPSANA COMMUNIS L. Franklin (R. W. Woodward, RHODORA xx. 98).

†SONCHUS ASPER (L.) Hill, var. PUNGENS Bischoff. Waste ground at Bridgeport (Eames). Flowers without ligules.

E. B. HARGER,

C. B. GRAVES,

E. H. EAMES,

C. H. BISSELL,

C. A. WEATHERBY.

SOME NOVA SCOTIA MOSSES.

EDWIN B. BARTRAM.

WHILE actively engaged in field work covering portions of central and southwestern Nova Scotia during July 1921 the writer, in company with Prof. M. L. Fernald and Mr. Bayard Long, collected about 140 numbers of mosses. No attempt was made to obtain a representative series as the pressure of other work left only brief intervals in which to pick up any thing that was obviously interesting and close to hand but as the material was worked over several range extensions suggested that a brief survey of some of the more interesting species might not be unworthy of record.

The bogs, lake shores and spruce woods of Yarmouth Co., where we spent most of our time, were relatively unproductive but as we worked north through Annapolis Co. into more broken country and on through the gypsum outcrops near Windsor to the granite and sandstone areas of Hants Co. and Halifax Co. the variety of species broadened to a rather gratifying extent.

Sphagnum macrophyllum Bernh. Covering the bottom of a shallow arm of Five Island Lake, Hants Co. Dr. A. LeRoy Andrews in his letter verifying the determination of this species says that this is the first record outside of the range from Maine to Florida given in the North American Flora and therefore new to Canada. It seems to be one of pine barren elements like *Sphagnum Pylaesii* or *Utricularia purpurea* that has spread northward through the marshes and pools of the coastal plain at a time when a continuous land connection existed between Newfoundland, Nova Scotia and the coastal plain

region of the Atlantic Seaboard States. At any rate it presents a very happy illustration of the theory which Prof. Fernald has so ably demonstrated.

Sphagnum Pylaesii Brid. Abundant in a shallow pond near Armdale, just outside of Halifax.

Andrea petrophila Ehrh. In dense reddish cushions on the granite ledges near Uniacke Lake, Hants Co.

Andrea crassinervia Bruch. With the preceding and more abundant. Also on dry sandstone faces bordering Shubenacadie Grand Lake, Halifax Co. Fruiting freely.

Dicranum fulvum Hook. Frequent on boulder faces throughout the range.

Dicranum fuscescens Turn. Rather common in thin soil on boulders and ledges.

Dicranum longifolium Ehrh. Rock faces near Armdale.

Dicranum montanum Hedw. Rock faces in woods near Armdale.

Dicranum spurium Hedw. Thin soil on sandstone and granite ledges in Hants Co. and Halifax Co. Frequent and variable.

Dicranum viride Schimp. On the bark of living trees bordering the lakes in Yarmouth Co. and Annapolis Co.

Ditrichum lineare (Sw.) Lindb. Springy bank near Yarmouth.

Grimmia maritima Turn. Very abundant in dense black cushions on the shore rocks and headlands of Cape Forchu, Yarmouth Co.

Grimmia Olneyi Sulliv. On sandstone rocks, Blueberry Point, Shubenacadie Grand Lake. This species has been found from the New England States west to southern Ontario and southward but the present record seems to extend the range quite a distance in the northeasterly direction. The tufts were vigorous and mostly pure with about the average number of fertile plants but in spots a mixture of *Andrea crassinervia* and *Rhacomitrium microcarpum* was much in evidence.

Rhacomitrium aciculare (L.) Brid. Frequent on wet rocks along the lakes shores. Generally sterile but occasional colonies richly set with fruit.

Rhacomitrium heterostichum alopecurum Hübn. Abundant on granite ledges near Lake Uniacke.

Rhacomitrium heterostichum gracilescens B. & S. With the preceding and hardly separable from it except by the strictly muticous leaves.

Both of these varieties seem very close to *R. sudeticum*. The more simple stem and absence of short lateral branches in the latter species may be influenced to some extent by the habitat. The distinguishing character is at best an unstable one and from a conservative point of view it would seem that all three forms might be conveniently grouped under *R. heterostichum* with varietal rank.

Rhacomitrium microcarpum (Schrad.) Brid. Common on granite faces in Hants Co. and Halifax Co.

Gymnostomum rupestre Schleich. Infrequent and sterile on gypsum ledges near Windsor.

Barbula fallax Hedw. On gypsum rocks near Windsor.

Tortula papillosa (Muell.) Wils. On shade trees in Windsor.

Ulota crispa Brid. Common throughout the region.

Ulota americana (Beauv.) Lindb. On shaded boulders along the lake shores.

Ulota Ludwigii Brid. Frequent and often mixed with *U. crispa*.

Aulacomnium androgynum Schwaegr. Found only on the ledges of the headlands of Cape Forchu, Yarmouth Co., where the slender deep green plants in dense cushions, very dark brown to blackish beneath, with numerous pseudopodia presented a striking combination of field characters.

Leptobryum pyriforme (L.) Wils. Crevices of gypsum rock near Windsor.

Mnium hornum L. Frequent in Yarmouth Co. and freely fruiting.

Pterigynandrum filiforme (Timm) Hedw. In fine yellowish green mats on shaded granite ledges near Uniacke Lake.

Hylocomium brevirostre (Ehrh.) B. & S. Shore of St. John Lake, Yarmouth Co.

Climacium dendroides (L.) Web. & Mohr. Edge of swale at Wentworth gypsum quarries near Windsor.

Campylium chrysophyllum (Brid.) Bryhn. Shaded gypsum ledges near Windsor.

Campylium stellatum (Schreb.) Bryhn. Wet meadow bordering Brazil Lake, Yarmouth Co.

Calliergon stramineum (Dicks.) Kindb. Wet savannah bordering St. John Lake, Yarmouth Co.

Leucodon sciuroides (L.) Schwaegr. Mixed with *L. brachypus* on old willow trees near Windsor.

Neckera complanata (L.) Hübn. On tree bordering St. John Lake. Sterile and apparently rare.

Neckera pennata (L.) Hedw. Common in woods bordering the lakes. The capsules are conspicuous and abundant.

BUSHKILL, PENNSYLVANIA.

WALDSTEINIA IN MAINE.—When the Portland Society of Natural History in 1862, issued its first "Catalogue of Maine Plants," *Waldsteinia fragarioides* (L.) Trattinick was listed from Bethel; but no specimens were produced to substantiate the claim, and the plant has never been found since then in that region. In fact from 1862 till 1922 the species had not been reported authentically from any portion of the state.

About June 1 of the current year, Frederick Godwin, a boy in the 7th grade, brought me a 3-inch bit from the top of a scape bearing one blossom and a calyx from which petals had fallen, but which plainly showed perigynous insertion of the stamens. A little study convinced me of the identity of the plant and I commandeered the services of a friend from Waterville to bring me in some of the plants. It was then so nearly out of flower that only three good specimens could be obtained. One of these has been placed in the herbarium of the New England Botanical Club. The colony is extensive and is located in the town of Benton.—JOHN C. PARLIN, Albion, Maine

Vol. 24, no. 281, including pages 77 to 100, was issued 25 July, 1922.